

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. **(Currently amended)** A device for regulating the temperature of a heating wire, the device comprising:

an electronic switch connected in series with the heating wire,

means for controlling the electronic switch,

wherein the device also comprises control means for controlling a switching time of the electronic switch wherein the switching time is a time necessary for the switch to transition from one state to assume another; and

wherein the control means for controlling ~~a switch~~ the switching time of the electric switch ~~control controls a control voltage across terminals of~~ applied to the switch as a function of a setpoint voltage ~~defining the switching time~~ so as to prolong the period required for the switch to transition from one steady state to another.

2. (Previously Presented) The device as claimed in claim 1, comprising: means for measuring a temperature of the heating wire, wherein the control means turn the electronic switch on and off as a function of the temperature of the heating wire.

3. (Previously Presented) The device as claimed in claim 2, wherein the means for measuring the temperature of the heating wire comprise means for comparing a voltage present at a common point between the electronic switch and the heating wire with a reference voltage.

4. **(Currently amended)** The device as claimed in claim 1, wherein the control means define ~~[[a]]~~ the switching time that is variably prolonged as compared to a normal switching time of the electronic switch taken in isolation.

5. **(Currently amended)** The device as claimed in claim 1, wherein the control means comprise an operational amplifier, ~~whereof~~ wherein a first input is connected to a common point of the heating wire and of the electronic switch, ~~whereof~~ wherein a second input receives the setpoint voltage and ~~whereof~~ wherein an output controls a turning-on and a turning-off of the electronic switch.

6. **(Currently amended)** The device as claimed in claim 2, wherein the control means define ~~[[a]]~~ the switching time longer than a normal switching time of the electronic switch taken in isolation.

7. **(Currently amended)** The device as claimed in claim 3, wherein the control means define ~~[[a]]~~ the switching time longer than a normal switching time of the electronic switch taken in isolation.

8. **(Currently amended)** The device as claimed in claim 2, wherein the control means comprise an operational amplifier, ~~whereof~~ wherein a first input is connected to a common point of the heating wire and of the electronic switch, ~~whereof~~ a second input receives the setpoint voltage and ~~whereof~~ wherein an output controls the turning-on and the turning-off of the electronic switch.

9. **(Currently amended)** The device as claimed in claim 3, wherein the control means comprise an operational amplifier, ~~whereof~~ wherein a first input is connected to the common point of the heating wire and of the electronic switch, ~~whereof~~ wherein a second input receives the setpoint voltage and ~~whereof~~ wherein an output controls the turning-on and the turning-off of the electronic switch.

10. **(Currently amended)** The device as claimed in claim 4, wherein the control means comprise an operational amplifier, ~~whereof~~ wherein a first input is connected to a common point of the heating wire and of the electronic switch, ~~whereof~~ wherein a second input receives the setpoint voltage and ~~whereof~~ wherein an output controls the turning-on and the turning-off of the electronic switch.